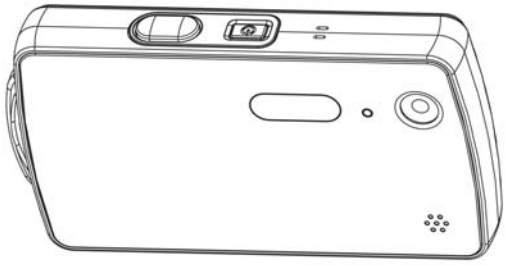
MEGXON

Digital Camera X52



USER'S MANUAL

Table of contents

Thank you for choosing our product. Please read the manual carefully to make best use of all functions of the product and to guarantee a long service life. Please store the manual in a safe place for later reference.

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1 Contents of package

Please ensure that the following items are included in the box:

1x digital camera
1x user manual
2x AAA batteries
1x USB cable
1x CD-ROM
1x carrying case
1x wrist strap

2 Introduction

This product is a digital imaging device with an integrated digital camera, digital video recorder, digital audio recorder and PC camera. It allows you to take digital photographs and videos, make voice recordings or use it as a webcam.

2.1 Product properties

- High resolution photographs, various resolutions can be selected, interpolated output.
- Images can be saved internally or externally.
- High-sensitivity wide-angle flash, three flash modes can be selected.
- Colour TFT LCD monitor for viewing menus and images.
- Three photography modes: single image, self-timer and burst
- TV output: NTS C or PAL
- digital sound recording
- Simple user interface
- Individual start interface for convenient operation
- Special picture effects such as conversion to black and white or nostalgic images
- Fast data transfer thanks to mini-USB connector
- Automatic shutdown conserves batteries

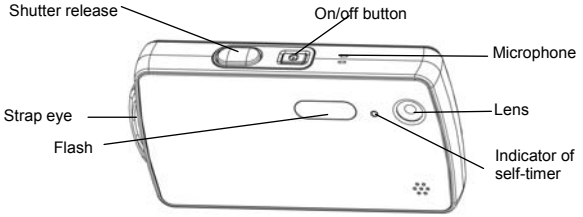
2.2 Five operating modes

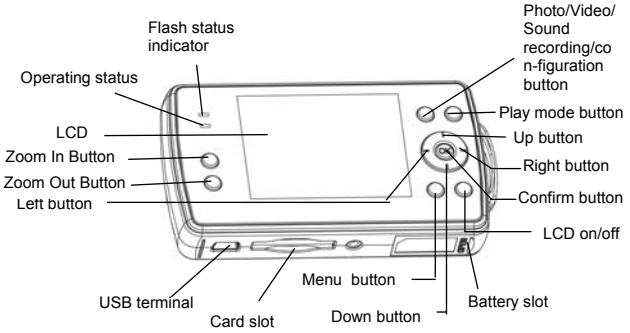
- Still image mode – for taking digital images/photographs
- Video mode – for taking high-quality videos with sound
- Recording mode – for sound recordings
- Play mode – for watching/listening to all recordings
- Configuration mode – for setting the operating parameters

3 Getting started

3.1 Parts of your camera

Familiarise yourself with the parts of your camera before use. That makes it easier to operate the camera.

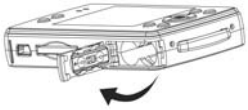




3.2 Inserting the batteries

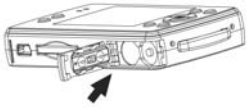
Use two AAA (micro) batteries.

1 Push the cover of the battery compartment in the direction indicated to open the compartment.



2 Open the cover of the battery compartment.

3 Insert the batteries into the battery compartment and ensure that the polarity is correct. Close the cover of the battery compartment by closing it over and pushing it back into place.



1. We recommend that you use rechargeable 1.2V NiMH batteries as they have a longer battery life.
2. You can also use 1.5V alkaline batteries.

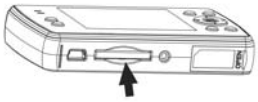
See the “Battery tips” section for details on the battery life.

3.3 Inserting and removing the SD/MMC card

You can use SD or MMC cards to increase the memory capacity. Switch off the camera before inserting the card. Insert the card as follows (photographs, sound and video recordings are no longer
stored in the internal memory, but stored on the card).

Inserting the card

1 Insert the card in the card slot until it locks into place.



Removing the card

Open the cover of the card slot. Press the card downwards briefly to unlock it. Remove or change the card and close the card slot cover again.

3.4 Attaching the carrying strap

Attach the carrying strap for your convenience and for safety reasons.

1 Pass the loop of the carrying strap through the eye as shown in the illustration.

2 Pull the other end of the carrying strap through the loop of the thin cord and pull the carrying strap tight.

Caution

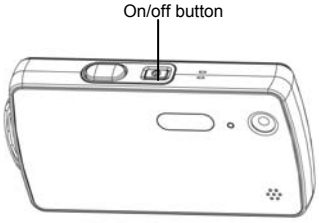
1. Do not hang the camera around your neck using the carrying strap to avoid danger. This applies to children in particular.
2. When carrying the camera on the strap, ensure that you do not hit the camera against anything.
3. When attaching the carrying strap, place the camera on a solid surface to ensure that it cannot fall down and be damaged.

4 Basic operation

4.1 Switching the camera on and off

Switching the camera on

Press the On/Off button for 1-2 seconds to switch the camera on. If the camera is not switched on, check the polarity of the batteries and ensure that they are charged.



Switching the camera off

Press and hold the main switch for several seconds to switch the cameral off. The LCD goes blank.

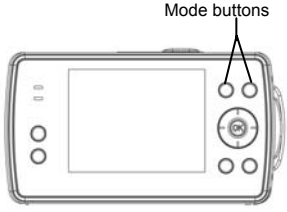
If the camera is idle for more than three minutes, it is switched off automatically to save battery power. Press the On/Off button for 1-2 seconds to switch the camera on again.
Automatic deactivation is not active in USB or record mode.

4.2 Using the mode buttons

The camera features five operating modes. When the camera is switched on,If USB is disconnected， it is automatically in still photograph mode. Press the following mode buttons to select the required mode.

/ /SET Selects the photography mode,Video mode,Recording mode and setting mode

Play mode



When the camera is in photography mode, press the /SET button to access the video mode.
When the camera is in video mode, press the /SET button to access the recording mode.
When the camera is in recording mode, press the /SET button to access the setting mode.
When the camera is in the setting mode or play mode, press the /SET button to return to the photography mode.
Press the button to acess the play mode.

When the camera driver type is DSC,If USB is connected,the camera automatically enter MSDC Mode.
In MSDC Mode,all mode buttons is disable,you can press the menu button and select Web Cam driver type to access the photography mode.if select DSC driver type or press menu button again,the camera retrun MSDC Mode.
If you want to enter MSDC Mode from other modes,you can activate the setting mode,select the DSC driver type.

4.3 Taking photographs

4.3.1 LCD descriptions display

Status symbols in the photography mode

0/7	Number of photographs taken, number of photographs available	0.5M	0.5 megapixel image mode
	Battery status	2.0M	2.0 megapixel image mode
	Single shot mode	3.0M	3.0 megapixel image mode
	Burst mode	4.0M	4.0 megapixel image mode
	Self-timer mode	5.0M	5.0 megapixel image mode
	Automatic flash	12M	12 megapixel image mode
	Flash always on	AWB	Automatic white balance
	Flash off		Daylight white balance
★★★	Best image quality		Tungsten white balance
★★	Medium image quality		Fluorescent white balance
★	Standard image quality		Cloudy white balance
			Using external memory card

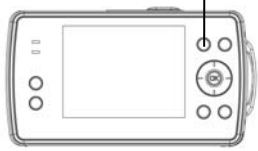
4.3.2 Snapshot

Press the On/Off button to switch the camera on.

1 **Select single shot mode**

When the camera is switched on, it is automatically in still photograph mode. If this is not the case, press the /SET mode button to select the photography mode. Photography mode is active when the symbol appears in the upper corner of the LCD display.

Photo/Video/sound recording/configuration mode



2 **Zooming in or out digitally**

Use the LCD to frame the image and press the button to zoom in or the button to zoom out.

3 **LCD**

You can now view the image on the LCD. The meaning of the status symbols shown on the LCD is explained in the table on page 11.

4 **Taking a photograph**

Press the shutter release down fully to take a photgraph.

Photographs taken with the camera are saved as JPEG files.

When you press the menu button in photography mode, the following menu functions are available for selection:

Page1:

- Capture Mode
- Strobe
- Resolution
- Photo Quality
- Photo Effect

Page 2:

- WB
- EV

You can choose between three different image modes in the “Capture Mode” menu function:

Single		When the shutter release is pressed, a single photograph is taken.
Sequence		When the shutter release is pressed, a series of three photographs is taken.
SelfTimer		The photograph is taken 10 seconds after the release is pressed.

The photography mode is preset to single-shot.
The LCD can be switched off using the sleep button(LCD on/off) to save power.

4.4 Recording audio

1 Press the /SET button to activate the digital recording function. The symbol is shown on the LCD. Before recording, the information shown at right is displayed. Press the shutter release once to start sound recording.

2 The information shown here is displayed when recording was started using the shutter release. Press the shutter release again to stop sound recording.

The sound is recorded as a WAV file. The length available depends on the size of the memory.
The LCD display can be switched off using the sleep button (LCD on/off) to save power.

4.5 Making video clips

4.5.1 LCD descriptions

The elapsed time is shown at the top right. The remaining time is shown at the bottom left.

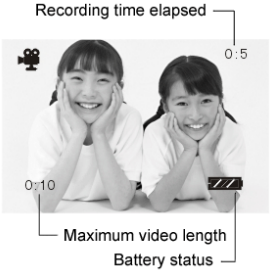
The display is not changed during recording and is not updated until recording is complete.

4.5.2 Making a video clip

Switch the camera on.

1 Press the /SET button for the video mode.
Video mode is active when the symbol appears in the upper corner of the LCD display.

2 Press the shutter release to start recording a video. Press the shutter release again to stop recording. The information shown at right is displayed on the LCD during video recording.



The video is recorded as an AVI file (with sound).

4.6 Playing images, audio and videos

4.6.1 LCD descriptions

Status symbols in play mode

Current system time: 11.02.2007, 12:02:47

Number of photographs taken / total photographs

Photo is protected

Photo is not protected

Current file is a photograph (jpg)

Current file is a video (avi)

Current file is a sound recording (wav)

4.6.2 Viewing photos, videos and listening to sound recordings

1 Press the ▶ button to activate play mode. You can now play photographs, videos and sound recordings. The ▶ symbol is shown on the LCD.

2 The following buttons are used to browse the photos/videos/sound recordings in play mode:

◀ Goes to the previous photo, video or sound recording

▶ Goes to the next photo, video or sound recording

OK Start/close thumbnail view.

Press the shutter release to start videos or sound recordings from the thumbnail view. Press the shutter release again to stop playing.

Thumbnail view

While playing photos, videos and sound recordings, you can open the thumbnail view by pressing the confirm button (OK button). This mode allows you to view several photos, videos or sound recordings at once.

Use the control buttons ◀, ▲, ▼ and ▶ to select a file and press OK to play the file.

There are three thumbnail modes: 2x2, 3x3 and 4x4, so that four, nine or sixteen thumbnails can be shown on the LCD.

4.7 Deleting photos

You can delete unrequired photos. Either single photos or all photos can be deleted. To do so, you must be in playback mode.

Deleting a single photo
Select the photo to be deleted in playback mode. Then press the menu button and select “Delete” and “Current” to erase the photo.

Deleting all photos
To delete all photos, press the menu button and select “Delete” and “All”. All photos are now deleted.

Formatting the memory

Press the /SET button to open the configuration mode. Select “Format”, press the OK button and select “YES” to start formatting. The menu is displayed again after formatting.

The method described above can also be used to delete video clips and sound recordings.

Caution
Protected data is not deleted but can be formatted. See page 29 for instructions on protecting and unprotecting data.

5 Advanced operation

5.1 Using the flash

If there is not enough available light for your photo, the built-in flash can provide the additional light required.

1 Switch the camera on and select the photo mode (single shot or self-timer mode).

2 Press the right button ▶ once or repeatedly to set one of three flash modes. The flash mode changes from “Auto” to “Always on” to “Off” each time you press the button. The corresponding status symbol for the flash mode is shown in the upper left corner of the LCD.

The flash is activated automatically when the light level is too low if the flash is set to “Auto”. When “Always on” is set the flash is used for every shot. When “Off” is selected, the flash is deactivated. The flash only works in single shot mode and self-timer mode. It does not work in burst and video mode.
When the flash is charging, the LCD will be shut down. And it will be light when completed.
Please note that using the flash increases battery consumption.

5.2 Using direct access buttons

Selecting photography mode directly

In photography mode, you can access the “Single” , “SelfTimer” and “Sequence” modes by pressing the left button ◀ repeatedly. The corresponding symbol is displayed at the top left of the LCD.

Selecting the resolution directly

In photography mode, the OK button can be used to select the resolution progressively. The current resolution is displayed at the top left of the LCD.

Accessing the flash mode directly

You can set the flash to “Auto” , “Always on” or “Off” by pressing the right button ▶ in single shot and self-timer modes.
The corresponding symbol is displayed on the LCD.

5.3 Changing menu options

The camera features image, playback and configuration menus.

1 Press the menu button to select Photography and Playback menus from the photography, playback mode.

Press the SET button to open the configuration menu.

2 Press the ▲ (up) and ▼ (down) buttons to select the corresponding option and press the OK button to confirm.

The respective option selected is highlighted in colour.

Photography mode menu Playback mode menu Configuration mode menu

Video mode menu

5.4 List of menu options

The menu contents vary in accordance with the operating mode. The menu contents may vary in accordance with the camera model. See “Specifications” on page 32 for further details.

Photography mode

Menu	Setting	Description
Capture Mode	Single	Take a single photograph
	Sequence	Takes a series of three photos
	SelfTimer	10 seconds self-timer
Strobe	AUTO	See page 20 for further details on the setting.
	Force	
	Forbidden	
Resolution	12 mega	12 million pixels
	5 mega	5 million pixels
	4 mega	4 million pixels
	3 mega	3 million pixels
	2 mega	2 million pixels
	0.5 mega	0.5 million pixels
Photo Quality	Superfine	Best image quality
	Fine	Medium image quality
	Economy	Normal image quality
Photo Effect	Normal	Normal photo mode
	B/W	Black and white
	Sepia	Photos with a nostalgic brown tone
WB	Auto	Automatic white balance
	Daylight	White balance for daylight mode
	Tungsten	White balance for tungsten mode
	Fluorescent	White balance for fluorescent mode
	Cloudy	White balance for cloudy mode
EV	−2.0 EV to +2.0 EV	Eight -step exposure compensation

Playback mode

Menu	Setting	Description
Protect	Lock Current	Protect current photo to prevent accidental deletion
	Unlock Current	Cancel protection for current photo

	Lock All	Protect all photos to prevent accidental deletion
	Unlock All	Cancel protection for all photos
Delete	Current	Delete current photo
	All	Delete all photos
Thumbnail	2 x 2	Show 4 thumbnails simultaneously
	3 x 3	Show 9 thumbnails simultaneously
	4 x 4	Show 16 thumbnails simultaneously
Set Logo	Use the current photo as the start-up image	
Play Logo	Enable	Select current photo as the start-up image
	Disable	Use the preset image as the start-up image

Configuration mode

Menu	Setting	Description
Date&Time	Set date and time for current photo	
Status ICON	On	Display symbol for current status
	Off	Hide symbol for current status
NTSC/PAL	NTSC	Set TV output to NTSC
	PAL	Set TV output to PAL
Format	Yes	Format internal/external memory
	No	Cancel format
Factory Reset	Yes	Reset values to factory settings
	No	Cancel factory reset
USB	WEBCAM	Set camera to WEBCAM mode, use as webcam
	DSC	Set camera to DSC mode. In this mode, functions such as downloading, copying and cutting can be used.
Language	Select the menu language (menu contents may vary in various models).	
Frequency	50HZ; 60HZ	

5.5 Exposure compensation

By correcting the exposure value (EV), you can adjust images which appear too light or too dark.

1 **Selecting the image mode**
Press the menu button in photography mode.

2 **Selecting EV**
Select the EV item in the menu and press OK to open the exposure option.

3 **Selecting an EV value**
Press ▲ or ▼ to select a suitable exposure compensation and press OK to confirm. The value can be set in eight steps between -2.0 EV and +2.0 EV.

Exposure compensation can be very useful. In dark conditions or in backlighting conditions set the value to a positive number and in bright conditions to a negative value.
Do not use exposure compensation if the subject is in a very bright or very dark area, or if the flash is used.

5.6 Selecting a language

When you use the camera for the first time, the texts on the LCD may not be displayed in your language. However, the LCD language can be changed easily.

1 Press the SET button to open the configuration menu.

2 Select the “Language” menu item and press OK to confirm.

3 Select the required language.

5.7 Setting the image resolution

The basic setting for the image resolution is 5.0 megapixels.

1 Press the menu button in photography mode.

2 Press ▲ or ▼ to select the “Resolution” option and press OK to confirm.

3 You can select one of six resolution settings:
12 megapixels, 5.0 megapixels, 4.0 megapixels, 3.0 megapixels, 2.0 megapixels and 0.5 megapixels. At the 12 megapixel settings, pixels are interpolated – no image bursts can be captured in these resolutions.

5.8 Setting image quality

The default image quality setting when the camera is switched on is “Fine”.

1 Press the menu button in photography mode.

2 Select the “Photo quality” item in the menu and press OK to confirm.

3 Press “up” or "down” to select the “Exposure” option and press OK to confirm.

- “Super fine” is the best quality which requires most memory,
- “Fine” is medium quality with a medium memory requirement and
- “Economy” is normal quality with a low memory requirement.

5.9 Setting image effects

The standard image effect setting when the camera is switched on is “Normal”.

1 Press the SET button to activate photography mode and press the menu button.

2 Select the “Photo Effect” item in the menu and press OK to confirm.

3 Press “up” or “down” to select the photo effect option and press OK to confirm.

- “Normal”: No special photo effect.
- “Black and white”: Images are recorded in black and white.
- “Sepia”: Images are recorded in a nostalgic brown tone.

Sepia: Brown/amber simulates the brown tone of old photos caused by oxidation of the chemical components of the photograph. Sepia shifts the brown tones of the digital image to the dark brown range to give the impression of an old photo.

5.10 Setting the driver

The default driver setting is DSC.
If the camera is in MSDC Mode

1 Press the menu button to activate the driver select menu.

2 Press ▲ or ▼ to select the required driver type and press OK to confirm.

If the camera isn't in MSDC Mode

1 Press the /SET button to activate the configuration menu.

2 Select the "Drive Type" item in the menu and press OK to confirm.

3 Press ▲ or ▼ to select the required driver type and press OK to confirm.

5.11 Protecting photos against accidental deletion

This camera offers a protect function to prevent selected images being accidentally deleted.

1 Press the button to start the playback mode. Open the photo to be protected. Press the menu button and select the "Protect" item.

2 Select the required option from the list displayed.

The list contains four options: "Lock Current", "Unlock Current", "Lock All", "Unlock All" (see also list of menu options on page 22).
The symbol appears on the image in the LCD if the image is protected against accidental deletion. The symbol appears when the protection option is cancelled for the photo.

Note

Protected photos cannot be deleted but can be formatted.

5.12 Viewing images on a television set

1 Connect the TV output of the camera to the video input of the television set using the cable supplied.

2 Connect the audio input of the TV to the headphone jack of the camera. The camera automatically recognises the television set and switches to TV.

When still images are played on a TV, black pixels may appear around the image.

5.13 Setting the date and time

Your digital camera can save the date and time each photo was taken and display this information in playback mode.
However, you must first set the date and the time for the camera.

1 Press the /SET button to activate the configuration menu.

2 Select the “Date&Time” item in the menu and press OK to confirm.

3 Now change the time setting. Select the setting required using the control buttons ◀ and ▶, and then change the value using the ▲ and ▼ control buttons.

Press OK to confirm the values after you have finished making the settings.

The date and time can only be displayed by the camera in playback mode. They cannot be printed.
The time settings are saved by an internal backup battery. Therefore, the time settings are not lost when the two replaceable AAA batteries are removed. The settings are not lost until the internal backup battery is flat.

5.14 Setting the LOGO

The LOGO is the startup image which is shown on the display when the camera is activated. This allows the user to define individual images. To do so, proceed as follows:

1 Press the ▶ button to start playback mode. Open the required photo Press the menu button and select the “Set Logo” item.

2 After setting the logo, select the option “Play Logo” in the playback mode menu. There are two options:

- Enable: The image selected by the user is used as the startup image.
- Disable: The preset image is the startup image.

The startup image is not deleted when images are deleted or the memory is formatted. To set another startup image, you must repeat the procedure described above.

6 Installing the software

6.1 Supported operating systems

- Windows 98 (including Second Edition)
- Windows Me
- Windows 2000
- Windows XP
- Windows Vista

Microsoft Windows 98, Windows 98 SW, Windows 2000 Professional, Windows ME , Windows XP or Windows Vista systems are pre-installed.

6.2 Installing the driver

Driver installation is similar for the various Windows systems. When specifying the path, you must simply select the driver in the CD-ROM drive.
The camera has two USB driver modes: Web Cam and DSC. DSC is the default setting. The procedure for installing the drivers for each of the two modes is described below.

6.2.1 Installing the driver in DSC mode

When the camera is in DSC mode, Windows ME, 2000 XP and Vista automatically recognise the camera and no driver must be installed. The description of the driver installation procedure refers to Windows 98.

1.
When the camera is connected to the computer in DSC mode, the Found New Hardware Wizard appears on your PC monitor.
Click “Next” to open the next window

Add New Hardware Wizard
This wizard searches for new drivers for:
COACH DSC
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel

2.
Select “Search for the best driver for your device” and click “Next”.

Add New Hardware Wizard
What do you want Windows to do?
Search for the best driver for your device. (Recommended)
Display a list of all the drivers in a specific location, so you can select the driver you want.
< Back
Next >
Cancel

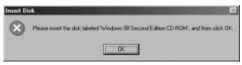
3.
Select “Specify a location” and click “Browse”. Specify the driver CD in your drive.

4.
Now click “Next”. The system installs the driver and the following window appears:

5.
Click “Finish” to complete installation.

Add New Hardware Wizard
USB Mass Storage Device
Windows has finished installing the software that your new hardware device requires.
< Back
Finish
Cancel

6.
You may be prompted to insert the Windows 98 CD during the installation process:



6.2.2 Installing the driver in Web Cam mode

1.
Connect the camera to the computer. The system should automatically recognise that a new device has been connected.

2.
In Web Cam mode, the driver must be installed for all systems. The procedure is similar to that described for DSC mode.

3.

Under Windows 2000, you may be asked about the digital signature of the driver. Click “Yes” to install the driver.

4.

When installing the driver on Windows XP the Found New Hardware Wizard appears. Select “Install the software automatically” (recommended).

The following window may appear. Click “Continue” and wait until the installation is complete.

5. The installation procedure under Windows ME and VIsta is similar.

Either of two driver modes can be selected for the camera.
Web Cam mode uses the video components for the PC (WebCam).
In DSC mode, the internal memory is used as mobile memory. It can be treated like a hard drive. You can copy, delete, cut and download photos and videos from the camera.
Location of the drivers on the CD:
(Example: “X:\ ” as the CD-ROM drive)
X: \Driver\mass: DSC driver for Win 98
X: \Driver\PC_Cam\win98_2K: Web Cam driver for Win 98 and Win 2000
X: \Driver\PC_Cam\WinMe_XP_Vista_32: Web Cam driver for 32 bit Win ME , Win XP and Wiin Vista.
X: \Driver\PC_Cam\WinXP_Vista_64: Web Cam driver for 64 bit Win XP and Wiin Vista.
Photos should be downloaded directly in DSC mode. To select the correct driver mode before installing the driver.

7 Transferring files to your PC

After you install the drivers, you can transfer your photos, videos and sound recordings to the PC using the USB cable, and view, play and edit them on your PC. The camera switches to USB mode.

1. Switch your PC on. Set your camera's driver mode to DSC.
2. Connect the digital camera to your PC by inserting the end of the supplied USB cable into the USB port of your PC and connecting the other end of the USB cable to the USB terminal of your camera.the camera enter MSDC Mode.
3. If the driver was installed correctly, the camera is identified by the computer as a DSC storage device (removable media). If you use Windows XP, you can access the contents of the camera memory immediately. In other Windows versions, open the Windows Explorer or double-click My Computer. Double-click the media symbol for the camera and, where applicable, the folders within it to view the files.
4. Now press and hold the left mouse button to drag the required files (images, sound or video) to a suitable folder on your PC, e.g. the "My Files" folder. You can also select the files and use the "Copy" and "Paste" Windows commands.

The files have now been transferred and saved to your PC. You can now view, play and edit the files using the application software.

USB power supply and webcam function

The camera is supplied with power via the USB port. This allows you to transfer data from the camera to the PC using the USB cable even when there are no batteries in the camera. You can use the camera as a webcam if you set the driver type of the camera to Web Cam. This allows you to use functions such as video capture, video monitoring or internet video conferences (netmeeting).

When the data is transferring between the camera and PC,Please don't operate the camera.

8 Specifications

Sensor	1/2.5" CMOS
Pixels	5.1 million
Effective resolution	2560x1920,2304x1728,2048x1536, 1600x1200, 800x600
Interpolated resolution	4000x3000
File formats	Photo: JPEG (EXIF 2.1 Version)
	Video: AVI/Motion JPEG
	Sound: WAV format
Special effects	Standard, black and white, sepia modes
Zoom factor	8x digital zoom
LCD monitor	2.36 inch TFT monitor
Compatible systems	Windows 98/2000/ME /XP/Vista
Focal length	F = 8.7 mm
Aperture	F2.8
Focus range	1m ~ infinity
Exposure	Auto and manual
Exposure compensation	-2.0 EV to +2.0 EV in eight steps
Date terminal	Mini USB terminal, two driver modes: DSC and WEBCAM
Flash	Integrated wide angle flash with three modes: Auto, always on and off
	Flash range 2 m
White balance	Automatic white balance and four manual modes: Daylight, tungsten, fluorescent, cloudy
Burst	Series of three photos
Self-timer	10 seconds
Video output	NTSC and PAL system available
	TV output signal
Other functions	sound recordings
	Memory can be expanded
	Webcam for internet chat and conference
	Customisable startup image
	Power supply via USB port
Memory medium	32MB internal (including system memory), SD or MMC card

9 Memory requirement

Resolution	Quality	Image size	8MB	16MB	32MB	64MB	128MB
2560x1920	Superfine	approx. 830kB	4	8	16	32	64
	Fine	approx. 600kB	5	10	20	40	80
	Economy	approx. 510kB	6	12	24	48	96
2304x1728	Superfine	approx. 620kB	5	10	20	40	80
	Fine	approx. 480kB	7	14	28	56	112
	Economy	approx. 400kB	8	16	32	64	128
2048x1536	Superfine	approx. 530kB	6	12	24	48	96
	Fine	approx. 400kB	8	16	32	64	128
	Economy	approx. 310kB	10	20	40	80	160
1600x1200	Superfine	approx. 310kB	10	20	40	80	160
	Fine	approx. 250kB	14	28	56	112	224
	Economy	approx. 200kB	17	34	68	136	272
1024x768	Superfine	approx. 150kB	26	52	104	208	416
	Fine	approx. 110kB	34	68	136	272	544
	Economy	approx. 90kB	43	86	172	344	688
800x600	Superfine	approx. 85kB	42	84	168	336	672
	Fine	approx. 70kB	54	108	216	432	864
	Economy	approx. 55kB	68	136	272	544	1088
Video	---	---	~10 sec	~30 sec	~70 sec	~150 sec	~3 min

The actual number of stored images can vary depending on the resolution and colour richness (up to ± 30%).

10 Troubleshooting

If your camera does not work properly, please check the following items. If the problem still exists please contact your dealer.

Symptoms	Cause and solution	
Error A Camera does not take photos	Cause:	Not enough light
	Solution:	Change angle of camera to include more light or use automatic flash.
Error B Photos disappear from the LCD after a period	Cause:	Weak batteries
	Solution:	Insert two fresh batteries.
Error C Not all images can be downloaded to the PC	Cause:	The PC does not have enough free RAM.
	Solution:	Close all other applications before downloading. If the problem persists, download the images one at a time to the PC and save them there before transferring the next image.
Error D Camera switches off after 5 minutes. LCD switches off.	Cause:	Camera shuts down automatically.
	Solution:	Restart camera.
Error E When the camera is connected to the PC for the first time, no new hardware is found.	Cause:	The PC's USB port is deactivated in the BIOS.
	Solution:	Activate the port in the PC's BIOS.
Error F The shot to shot time is longer when taking pictures in dark conditions.	Cause:	It is normal for the shutter speed to be slower in dark conditions.
	Solution:	Change the camera angle or improve the light conditions.
Error G The camera does not start after connection to the PC. The camera display lights up and LCD shows all symbols.	Cause:	PC or camera is busy and there is no connection between the two.
	Solution:	Disconnect the USB cable from the PC, check why the PC is busy and insert the cable again.

Note: This table contains possible causes of error. Some of these are normal phenomena.

11 Further information

11.1 Safety instructions

Although this product is safe, please observe the following information and warnings.

Caution

1. Do not modify or dismantle the camera.
2. Contact your dealer for repairs and inspections.
3. Do not shake the camera or subject it to hard knocks. The camera may be damaged if it falls.
4. Ensure that no water or moisture enters the camera. This can cause short circuits and accidents.

Note

When using the flash, do not look directly into it, as this can damage the eyes.

11.2 Maintenance and care

Please clean the body, lens and LCD as follows:

- Do not use thinning or cleaning agents which contain petrol. This could damage the camera.
- Clean the **camera body** with a soft cloth.
- **Lens:** First remove dust with a lens brush. Then clean with a soft cloth.
- Do not use powerful cleaning agents on the body and lens (contact your dealer if dirt cannot be removed).
- Do not apply pressure to the **LCD** or use hard objects to clean it.

11.3 Photo tips

For excellent photographs, please observe the following tips:

- Do not move the camera quickly to prevent the photos being out of focus. Hold the camera steady when pressing the shutter release. Do not move the camera immediately after pressing the shutter release. Wait until you hear the sound signal before moving the camera.
- Look at the subject through the viewfinder before pressing the shutter release.
- Check the angle if the subject is backlit. Move to the side to reduce the backlighting.
- In dark conditions, the flash or manual exposure setting should be used.

- Move/pan the camera slowly to make good videos. Pans that are too fast result in out of focus and blurry videos.

11.4 Battery tips

Incorrect handling of the batteries can cause them to leak, become hot or explode. Observe the following safety instructions:

- Do not heat batteries or dispose of them in fires.
- Do not transport batteries with metallic objects, as they can come into contact with the battery poles and cause damage.
- Do not expose batteries to moisture. Always store them in a dry area.
- Do not dismantle, deform or modify batteries.
- Never remove the cover of the battery.
- Do not subject the battery to hard knocks.
- Never use leaking or damaged batteries.
- Keep batteries out of reach of children.
- Ensure that the polarity is correct when inserting the batteries into the camera.
- Battery power is reduced in cold environments (−10°C or colder, applies to alkaline batteries in particular).
- Warm up batteries before use in cold environments (e.g. in your pocket).
- When using a heat source, do not allow batteries to come into contact with it.